

2018

# BONE STOCK ENDURO RULE BOOK

Track Website: www.delawarespeedway.com

### **DRIVER ELIGIBILITY**

Minimum Qualification: Drivers must be 16 years or older before competing in the Delaware Speedway Bone Stock Enduro division. <u>All drivers under 18 must</u> have parental consent form signed. If Driver is under 16 years special approval is required from Delaware Speedway Race Director. Any driver under 18 years of age MUST use an approved Head/Neck Restraint system.

# Signed waivers are required for ALL competitors in the series NO EXCEPTIONS. These waivers are completed on registration and at the competitor gate the day of the event.

**Vehicle:** Open to any "compact" make/model of front-wheel drive, FRONT WHEEL DRIVE, 4 CYLINDER ENGINES ONLY.

- 1. Not Permitted: Rear-wheel drive, All Wheel drive, & four-wheel drive vehicles.
- 2. <u>NO</u> turbos / superchargers, Cars with "Variable cam timing" must be disabled If unsure, contact tech department.
- 3. No cars with Horsepower rating of 180 or higher. Max Engine size 2.8L Litre. Certain high Horsepower rated cars may receive weight penalties to equalize the field.
- 4. Cars that have 24.5 or less lap times may have weight penalties applied, multiple winners may have weight penalties applied

### **CAR CLAIM:**

### Procedure for claiming competitor's car is as follows:

- 1. Driver & car must finish in top 10 (receive checkered flag & complete 75% of event)
- 2. Only registered drivers with 100% attendance may claim another car
- 3. Any driver wishing to claim another competitor's car must do so within 5 minutes of the main event completion.
- 4. The driver wishing to make the claim must drive their own car to tech garage and notify tech official within that 5-minute period.
- 5. The driver making the claim must provide \$2000.00 cash to tech official, state the car # that he/she is wishing to claim & forfeit their own car to the tech official.
- 6. The car that was claimed MUST race at next event by individual that claimed the car

# Procedure for accepting claim:

- 1. Car # that is being claimed will be informed by tech official to return to tech garage.
- 2. Driver of claimed car has 5 minutes to decide if he/she is willing forfeit their car.
- 3. If driver agrees to forfeit car, they will receive \$2000.00 CASH + competitor's car.
- 4. Cars will be exchanged minus:
  - Driver seat/seat belts
  - Battery
  - Racing steering wheel
  - Tach & other gauges

# Procedure for NOT forfeiting claim car:

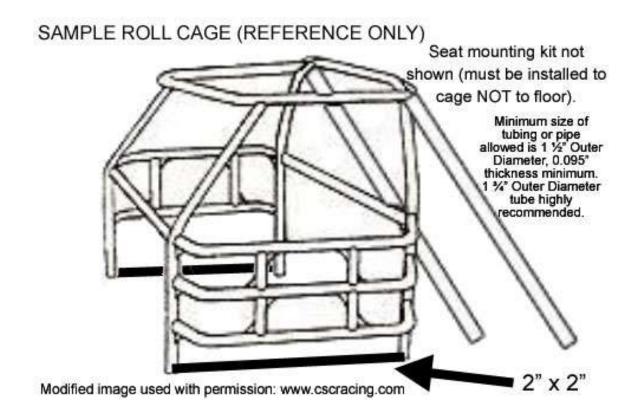
- 1. Driver & car # will received zero points & zero money for that race event.
- 2. Driver & car # will receive a one race suspension.

### 1. **SAFETY EQUIPMENT:**

**Helmet and Apparel:** Drivers are required to wear full coverage; one or two-piece Nomex multi- layered fire suits which are S.F.I. rated. Driver helmets must conform to Snell SA2010 or higher SA standards and have a certification sticker visible inside the helmet. SA-2015 highly recommended. It is highly recommended that drivers wear eye protection designed for auto racing. Nomex neck collar <u>mandatory</u>. Any driver under 18 years of age MUST use an approved Head/Neck Restraint system.

- 1. **Gloves and Footwear**: Fire retardant gloves are mandatory. Leather shoe / boot or fire-retardant race shoe mandatory. No nylon sneakers.
- 2. **Belts and Harness:** A quick-release 5-point belt (shoulder and lap) of no less than 2" in width, and 2" width anti-submarine harness in good condition are mandatory. Shoulder harnesses must be mounted and secured at the driver's shoulder height. Belts must be securely fastened to the frame, cross-member or roll cage by means of a suitable reinforced mounting, in such a manner that all fittings are in direct line with the direction of pull. Belts may not be any older than 3 years (manufacturer's date). All belts and mounting will be subject to inspection.
- 3. **Window Net:** An approved nylon ribbon type net must be installed in driver's side window opening. Net sizing must be at least 16" x 18". Net must be installed so it is tight. Window net anchors must be attached to roll bars, not body. Window net must be quick-release type. Net must be permanently anchored at the bottom and release at the top. Lever-latch releases are highly
- 4. **Seats and head Rest:** Approved aluminum bucket seat is mandatory. NO home-made seats allowed. Seats must be bolted or secured solid so that the seat will not shift or loosen on impact. All retainer bolts (minimum of 6) must be min. 3/8". Seat must completely to the left of the centerline of the car and inside the frame rail. An approved padded headrest is mandatory and must be securely mounted. Head and shoulder containment seat highly recommended.
- 5. **ROLL CAGE:** Car must have full roll hoop mounted securely to the floor behind the driver's seat with a cross brace from side to side. Complete four-point roll cage is mandatory. All interior door bars must be padded where the driver may come in contact with them. Minimum size of tubing or pipe allowed is 1 ½" Outer Diameter, 0.095" thickness minimum. 1 ¾" Outer Diameter tube highly recommended. **WATER PIPE IS NOT PERMITTED. THE ENTIRE ROLL CAGE MUST BE SECURELY WELDED TOGETHER** 
  - a. Main greenhouse loop may not exceed 3" inward from either the A, B, or C pillar. Front window bars may not exceed 3" inward from windshield post. Side bars are compulsory.
  - b. "A" pillar bar & "B" pillar bar must be connected along floor by 2X2 square tube min. SEE DIAGRAM below.
  - c. Minimum of 3 bars on left side, 2 bars on the right side. A diagonal bar must be added to the roof hoop as well as the main hoop (behind the driver seat). Top door bar must be within one (1) inch of the top of door panel, and the remaining bars must be equally spaced down. The bay bar should be in line with the top door bar.
  - d. All support bars extending to the body panels must be at 90 degrees and welded at both ends.
  - e. Threaded pipe, Pipe fillings, lap weld pipe, magnesium or aluminum are NOT permitted. No square tubing, channel and angle iron will be permitted in the

construction of the roll cage or bracing. Flush grinding welds are not permitted.





### 2. Mechanical Rules:

- 1. ALL cars must be "stock" year, make, and model with no modifications. This includes all engine components, drive train, suspension, and cooling system.
- 2. Water only in the cooling system.
- 3. Air intake must be located under hood. NO COLD AIR INTAKE KITS.
- 4. Engine must be completely stock.
- 5. Clutch & drivetrain must be completely stock
- 6. Engine computer system MUST have factory settings!
- 7. ABSOLUTELY NO engine modifications or computer system modifications.
- 8. Engine modifications, and/or factory equipped power adders: Any engine equipped with variable valve timing, or secondary valve systems, must be made ineffective (disabled) on the vehicle. EXAMPLE: A Honda/Acura B17C1 DOHC 1.7L VTEC would not be allowed to have the VTEC solenoids enabled. Another example would be Mitsubishi's MIVEC system.
- 9. Air Bags: All air bags must be removed.
- 10. Any rad that will fit within the stock rad cradle is allowed. Water only, no anti-

freeze.

### 3. Battery:

 BATTERY: Must be securely fastened. (If mounted in the interior of the car, battery must be fastened securely to the floor behind driver's seat). Battery must be covered. Cover must be fastened independent of the battery hold down. REMEMBER – Batteries are heavy and full of acid. In the event of an accident, insecure batteries could severely injure

### 4. Body/Appearance:

- 1. No "gutting" of interior panels. Must have full inner door panels, etc. Inner door panels may only be removed to provide clearance for roll bars.
- 2. Stock hood & trunk bracing.
- 3. Stock hood/trunk latch must be removed & hood/trunk must be fastened using a Quick hold-down release for fast hood/trunk entry must be devised for emergency access to trunk.
- 4. All side windows & rear window must be removed.
- 5. If stock windshield is to be used, center bar must be installed in windshield opening, of minimum 1" x 1/8" flat stock mounted between the dash bars and the upper halo bar of the roll cage. Alternately, competitors may use lexan window or a screen with Minimum of two interior support beams (No Plastic) no more than 1 inch wide and 1 inch deep to follow contour of inside windshield are mandatory.
- 6. Steel or plastic rub rails permitted
- 7. REINFORCEMENT BARS: No added reinforcement bars other than around the driver's compartment will be allowed. Manufacturers crumple zones must be kept intact. Cross-bars between strut towers (front & rear) will be permitted no larger than 1" steel tubing welded or bolted securely.
- 8. All doors must be welded or bolted. Sunroof cars must be covered with 22-gauge sheet metal min.
- 9. No sheet metal screws or aluminum nailed rivets.
- 10. PLASTIC / GLASS COMPONENTS: Stock bumper covers should remain in place. All stock headlights and taillights maybe be removed.
- 11. DASH, SEAT & UPHOLSTERY: Stock dash may remain in place. Carpet and stock seats must be removed.
- 12. All cars must have a chain mounted securely at front & back of car to provide lifting point for tow truck.
- 13. The tech committee may reject cars that are considered improperly prepared

### 5. Brake System:

- 1. ABS/traction control system MUST be disconnected at module. ABS/traction control systems must be disabled.
- 2. All four-wheel brake assemblies must function correctly.
- 3. Stock-Type rotors, No grooved or drilled rotors

### 6. Exhaust System:

- 1. NO HEADERS!! 1 ¾ Inch max exhaust system Catalytic converters may be removed.
- 2. Exhaust must exit out the side or rear of car.
- 3. Cars may use the FULL stock exhaust system. If exhaust system is altered, replacement pipes MUST be 1 ¾ inch MAX.
- 4. Cars must run stock-type mufflers. No straight-thru mufflers.
- 5. AP Exhaust Part # 709004 muffler is an approved muffler. AP exhaust is available from APC auto parts stores. http://www.autopartscentres.com/

### 7. Fuel System:

- Stock tank may be used in stock location. Additional shielding must be installed under the tank. Small fuel cell in trunk is recommended. If used, parcel shelf and panel behind rear seat back rest to be completely sealed with minimum 22-gauge steel.
- 2. No Plastic fuel filters. All fuel lines must be securely mounted under the car.
- 3. NO INLINE FUEL PUMPS. Fuel pump must be mounted inside fuel cell/tank.
- 4. OE Fuel Injected cars must have a fuel pump shut-off switch. The switch must be a "push/pull" type switch & must be mounted in the roof directly above the driver & clearly labeled.

### 8. Steering/Suspension System:

- All SUSPENSION COMPONENTS MUST BE COMPLETELY STOCK, unless otherwise noted
- 2. NO BUMP STOPS.
- 3. Camber + or 3 deg camber permitted on LF, LR & RR
- 4. Max camber for RF 6 Deg
- 5. RR may use 1988-2005 Dodge caravan wheel hub assembly
- 6. All suspension components must be stock & same on both sides of car. (Same sway bar link length, same coil spring diameter/length, etc.)
- 7. No Bending or altering steering knuckles, control arms, coil springs, strut mounts, etc.
- 8. If suspension/steering components are damage or bent during race it MUST be repaired prior to next race day event.
- 9. No racing / lowering / performance springs.

### 9. Tires/Wheels:

- 1. All tires/wheels must be the same size diameter (Example: All tires/wheels14inch).
- 2. All tires must be 55 series or higher. (Example: P185/55/14)
- 3. Must be 400 or more tread wear rating. NO SNOW TIRES
- 4. Minimum tire tread depth applies tread must be above wear indictor
- 5. All tires must be standard passenger car street type tires. Must be DOT approved
- 6. No Shaved or treated tire(s) will be permitted.
- 7. Purchasing of new tires is not encouraged and may result in a vehicle being designated "overly competitive" and starting the event with a penalty.
- 8. All wheels must have same wheel offset.
- 9. Aftermarket racing wheel permitted on RF only (must be same offset as only wheels)
- 10. ALL TIRES ARE SUBJECT TO APPROVAL OF OFFICIAL IN CHARGE.

### 10. Radios:

1. NO 2-way radios permitted, one-way scanner radio is mandatory to race at Delaware Speedway, no exceptions!

NOTE: Interpretation of these rules will be solely up to the judgment of the officials in charge of the area in question. DELAWARE SPEEDWAY reserves the right to impound non-complying components with no compensation to the owner(s). Noncompliance with the specifications outlined herein may subject violating teams to disqualification, loss of points and moneys and/or fine.

NOTE: IF IT DOESN'T SAY YOU CAN DO IT, ASK THE TECH DIRECTOR FIRST ALL DECISIONS BY PIT STEWARDS, CHIEF TECHNICAL INSPECTOR OR DELAWARE SPEEDWAY EXECUTIVE COMMITTEE MEMBERS WILL BE FINAL. ALL RULES SUBJECT TO INTERPRETATION BY DELAWARE SPEEDWAY OFFICIALS. RULE BOOKS WILL BE ISSUED TO MEMBERS. ALL EQUIPMENT NOT GOVERNED BY THE AFOREMENTIONED RULES ARE TO BE SUBMITTED TO DELAWARE SPEEDWAY, NOT LESS THAN 30 DAYS PRIOR TO THE DATE OF INTENDED USAGE. NO EQUIPMENT WILL BE CONSIDERED APPROVED BY REASON OF HAVING PASSED THROUGH INSPECTION UNOBSERVED. RULES APPLY TO ALL RACE EVENTS.

### **TECHNICAL QUESTIONS:**

For all tech related questions, please contact Darryl Timmermans – tech@delawarespeedway.com